

1. Device Name SPXO
2. Model Name DSO211SXF
3. Nominal Frequency 50.000 MHz
4. Reliability AEC-Q200 Compliant
5. Absolute Maximum Ratings

	Item	Symbol	Rating	Unit
1	Supply Voltage	V_{CC}	-0.3 ~ +4.5	V
2	Storage Temperature Range	T_{stg}	-40 ~ +125	°C

6. Recommended Operating Conditions

	Item	Symbol	min.	typ.	max.	Unit
1	Supply Voltage	V_{CC}	+1.6	+1.8	+2.25	V
			+2.25	+2.5	+2.75	V
			+2.6	+2.8	+3.0	V
			+3.0	+3.3	+3.6	V
2	Output Load	L_{CMOS}	-	-	15	pF
3	Operating Temperature Range	T_{use}	-40	-	+105	°C

7. Electrical Characteristics ($T_a=+25^{\circ}\text{C}$, $V_{CC}=+1.8\text{V}\sim+3.3\text{V}$, $L_{CMOS}=15\text{ pF}$, unless otherwise noted)

	Item	Symbol	Condition	Limits			Unit	Notes
				min.	typ.	max.		
1	Frequency Tolerance	f_{tol}	$V_{CC}=+1.8+1.8/-0.2\text{V}$, $T_a=-40\sim+105^{\circ}\text{C}$	-30	-	+30	ppm	1,2
2	Current Consumption	I_{CC}	At No Load	$V_{CC}=+1.8\text{V}$	-	-	2.7	mA
				$V_{CC}=+2.5\text{V}$	-	-	3.4	mA
				$V_{CC}=+2.8\text{V}$	-	-	3.7	mA
				$V_{CC}=+3.3\text{V}$	-	-	4.2	mA
3	Stand-by Current	I_{std}	#1 pin "L" Level	-	-	10	μA	
4	Output Characteristics							
	1.Symmetry	SYM	$V_{CC}\times 0.5$ Level	45	-	55	%	
	2.Rise Time / Fall Time	t_r / t_f	$V_{CC}\times 0.1 \sim V_{CC}\times 0.9$ Level	$V_{CC}=+1.8\text{V}$	-	-	5	ns
				$V_{CC}=+2.5\text{V}$, $+2.8\text{V}, +3.3\text{V}$	-	-	3	ns
	3.0 Level Voltage	V_{OL}		-	-	$V_{CC}\times 0.1$	V	
5	4.1 Level Voltage	V_{OH}		$V_{CC}\times 0.9$	-	-	V	
	Input OE							
	1.Output Enable Time	t_{PZL}		-	-	2	ms	
	2.Output Disable Time	t_{PLZ}		-	-	200	ns	
	3.0 Level Input Voltage	V_{IL}		-	-	$V_{CC}\times 0.3$	V	
	4.1 Level Input Voltage	V_{IH}		$V_{CC}\times 0.7$	-	-	V	

Notes

1. Ref. to nominal Frequency
2. Please leave after reflow in 8h or more at room ambient.

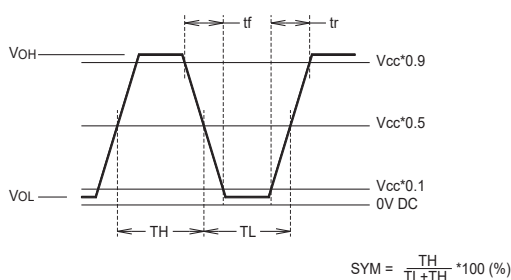


Fig.1 Output Waveform

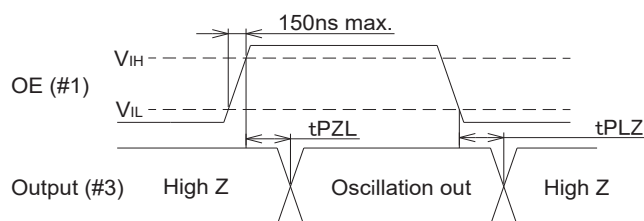
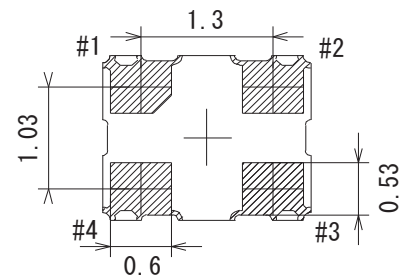
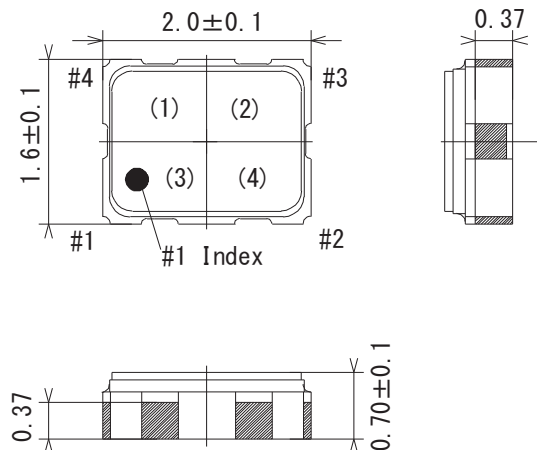


Fig.2 Input output condition

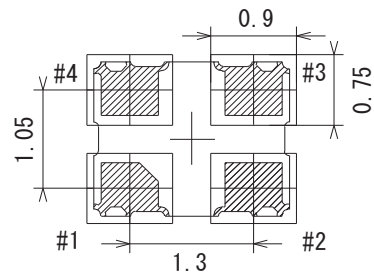
TITLE	REMARK		
DSO211SXF TYPE SPECIFICATION	P2025-3207		
DATE	SPEC. No.	REV.	PAGE
2025/12/24	7FF05000A1N	-	1 / 2

8. Outline, Pin Connections

Outline



Land pattern layout (Example)



Pin Connections

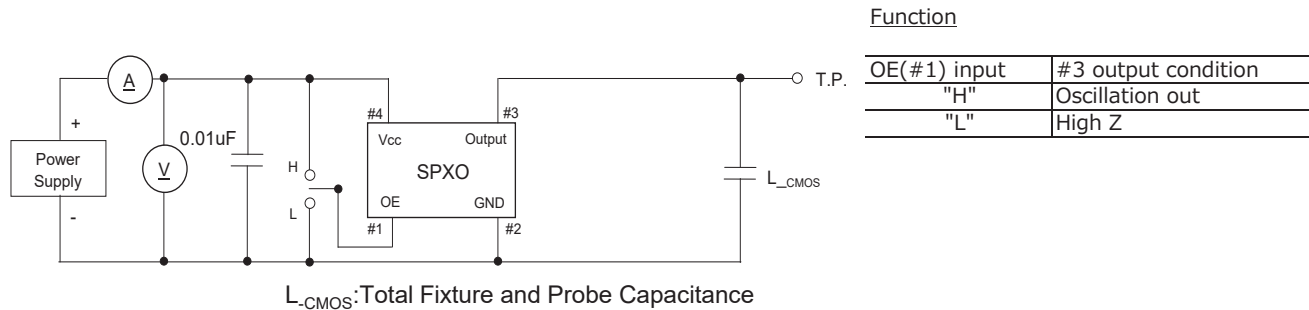
Pin No.	Connection
#1	O.E.(Output Enable)
#2	GND
#3	Output
#4	Vcc

Marking

(1) Model code	XF
(2) Frequency	50.0
(3) Logo	D
(4) Lot No.	Year (1digit) +Week (2digits) e.g.2025/1/1 → 501

unit: mm
Dimensional Tolerance: ±0.1
(Unless otherwise noted)

9. Measurement Circuit



Function

OE(#1) input	#3 output condition
"H"	Oscillation out
"L"	High Z

TITLE	REMARK		
DSO211SXF TYPE SPECIFICATION	P2025-3207		
DATE	SPEC. No.	REV.	PAGE
2025/12/24	7FF05000A1N	-	2 / 2